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Japanese spider of the genus *Zygiella* (Araneae: Araneidae)

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Abstract — Although two species of the spider genus *Zygiella*, *Z. dispar* (Kulczyński 1885) and *Z. montata* (C. L. Koch 1834) have been recorded from Japan, I recognized only one species of the genus after the examination of many spider specimens from Japan. Judging from the figures made by Levi (1974) and the specimens from Canada, I determined the Japanese specimens as *Zygiella dispar*.

Key words — Araneidae, *Zygiella dispar*, Japan

Up to the present, two species have been recorded from Japan as spiders belonging to the genus *Zygiella*: *Z. dispar* (Kulczyński 1885) and *Z. montata* (C. L. Koch 1834) (Tanikawa 2000). *Aranea dispar* (=*Zygiella dispar*) was recorded from Japan by Bösenberg and Strand (1906). This is the only record of this species from Japan. On the other hand, Yaginuma (1967) recorded *Zygiella montata* from Mt. Yatsugatake, Honshu, Japan. After his report, several Japanese araneologists recorded the latter species from Hokkaido and Honshu (Yaginuma 1974, 1986; Shinkai & Takano 1984; Chikuni 1989: The author name and date of publication of the species have consistently been cited erroneously as "C. Koch 1839" since the first entry in Japanese records by Yaginuma 1967. The error is reiterated also in Tanikawa 2000).

After examining many spider specimens collected from various parts of Japan, I recognized only one species of *Zygiella* occurring in Honshu and Hokkaido. I compared these specimens with the figures of *Zygiella* spiders made by Levi (1974). Judging from his drawings, the Japanese specimens should be identified with *Z. dispar* rather than *Z. montata*. To confirm this identification, I compared the Japanese specimens with the Canadian ones of *Z. dispar* determined by H. W. Levi (MCZ 43003). Although there were slight differences in the shape of male palp between the Japanese specimens and the Canadian ones, I considered them to be intraspecific variations.

The voucher specimens of this study are deposited in the collection of the Department of Zoology, National Science Museum, Tokyo (NSMT).

I wish to express my heartfelt thanks to Dr. Tadashi Miyashita, University of Tokyo, for critical reading of the manuscript of this paper. My sincere thanks are also due to Ms. Laura Leibensperger, Museum of Comparative Zoology, Harvard University (MCZ), Mr. Yosuke Fujisawa, Nagano, and Ms. Mayumi Matsuda, Hokkaido, for offering or loaning the valuable specimens used in this paper.

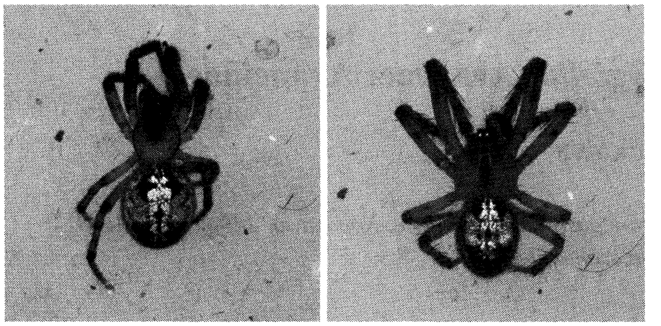
Description

Family Araneidae
Genus *Zygiella*
Zygiella dispar (Kulczyński 1885)
[Japanese name: Yama-kireami-gumo]
(Figs. 1–6)

Zilla dispar Kulczyński 1885, p.24, pl.9, fig.7.
Zygiella dispar: Levi 1974, p.278, figs.32–50.
Zygiella montata: Yaginuma 1967, p.94; Yaginuma 1974, p. 59, pl. 24, fig. 140; Shinkai & Takano 1984, p.76; Yaginuma 1986, p.108, pl. 27, fig. 5, Chikuni 1989, p. 77, fig. 44. [nec. *Zygiella montana* (C. L. Koch 1834)]

Specimens examined. JAPAN: 1♂, Mt. Nipesotsu, Kamishihoro-cho, Hokkaido, 19–VII–1981, M. Matsuda leg. 1♀, Higashi-nupukaushinupuri, Shikaoi-cho, Hokkaido, 23–VI–1999, M. Matsuda leg. 1♂, Lake Komadome, Shikaoi-cho, Hokkaido, 28–VII–1994 (collected as subadult), 9–VIII–1994 (adult after breeding), M. Matsuda leg. 3♀, Lake Shikaribetsu, Shikaoi-cho, Hokkaido, 10–VII–2000, M. Matsuda leg. 1♀, same locality, 1–X–2001, M. Matsuda leg. 2♀, Ukishima Moor, Kamikawa-cho, Hokkaido, 1–VIII–1995 (collected as subadult), 10–VIII–1995 (adult after breeding), M. Matsuda leg. 9♀1♂, Yachiho-mura, Minami-saku-gun, Nagano Prefecture, 28–VIII–1999, Y. Fujisawa leg. (NSMT–Ar 5219–5220). 1♀1♂, Mt. Fuji, Fujiyoshida-shi, Yamanashi Prefecture, 5–VII–1984, K. Kumada leg. (NSMT–Ar 5221–5222). CANADA: 6♀1♂, Terrace, British Columbia, 1937, M. E. Clark leg. (MCZ 43003).

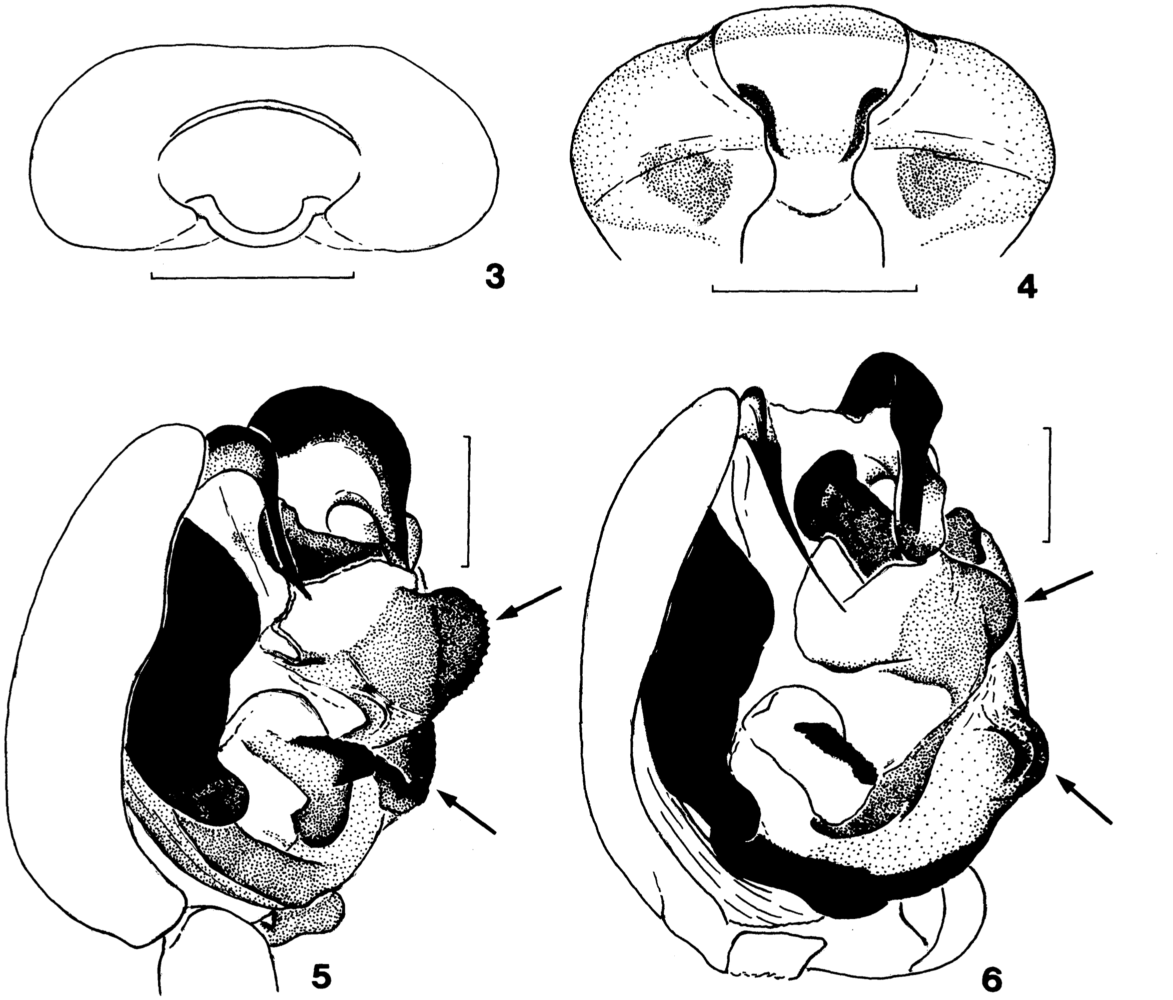
Diagnosis. As was mentioned by Levi (1974), *Zygiella dispar* is distinguished from *Z. montata* by: 1) the median depression of the epigynum has a constriction in posterior view, and 2) the shape of sclerotized parts of the male palp is slightly different and positioned differently (cf. Levi 1974, figs. 41–42, 55–56).



Figs. 1-2. *Zigyella dispar* —— 1(Left), female (NSMT-Ar 5219); 2(Right), male (NSMT-Ar 5221).

Description of Japanese specimens. Based on 1♀ from Nagano Prefecture (NSMT-Ar 5219) and 1♂ from Yamanashi Prefecture (NSMT-Ar 5221), variations are given in the parentheses. Measurements (in mm). Body ♀5.00 (4.18-6.54), ♂4.75 (4.35-5.59) long. Carapace ♀2.11 (2.11-2.57), ♂2.54 (2.04-2.54) long; ♀1.64 (1.64-1.90), ♂2.06 (1.82-2.20) wide. Length of legs [female/male; tarsus + metatarsus + tibia + patella + femur = total]: I, 0.78 + 2.00 + 1.69 + 0.93 + 2.07 = 7.47/0.97 + 2.86 + 2.43 + 1.04 + 2.57 = 9.87; II, 0.66 + 1.47 + 1.22 + 0.82 + 1.74 = 5.91/0.81 + 2.20 + 1.80 + 0.97 + 2.21 = 7.99; III, 0.51 + 0.91 + 0.69 + 0.60 + 1.22 = 3.93/0.60 + 1.23 + 0.99 + 0.69 + 1.69 = 5.20; IV, 0.56 + 1.27 + 1.08 + 0.74 + 1.63 = 5.28/0.63 + 1.63 + 1.17 + 0.83 + 1.90 = 6.16. Abdomen ♀2.97 (2.40-3.96), ♂2.29 (2.28-3.30) long; ♀2.53 (2.29-3.40), ♂1.97 (1.78-2.72) wide.

Female and male. Carapace longer than wide [length/width ♀1.28 (1.25-1.35), ♂1.24 (1.12-1.24)]. Median ocular area slightly wider than long [length/width ♀0.98 (0.87-1.02), ♂0.96 (0.96-1.00)]; slightly wider in front than behind [anterior width/posterior width ♀1.02 (1.02-1.06), ♂1.02 (1.00-1.08)]. Chelicera with 3 promarginal and 3 (3-4) retromarginal teeth. Labium wider than long [length/width ♀0.67 (0.64-0.70), ♂0.72 (0.66-0.72)]. Sternum longer than wide [length/width ♀1.17 (1.17-1.30), ♂1.22 (1.16-1.26)].



Figs. 3-6. *Zygiella dispar* —— 3, epigynum, ventral view (NSMT-Ar 5219); 4, same, posterior view (NSMT-Ar 5219); 5, male palp, lateral view (NSMT-Ar 5221); 6, same (MCZ 43003). (Scales: 0.25mm)

Length of leg I/length of carapace ♀3.54 (3.43–3.67), ♂3.89 (3.89–4.31). Male palp: Embolus filiform, embolic division with one more large sclerite situated parallel to embolus; radix well sclerotized (Figs. 5–6). Abdomen longer than wide [length/width ♀1.17 (1.05–1.18), ♂1.16 (1.11–1.28)]. Epigynum: in posterior view, the median depression with a constriction (Fig. 4).

Coloration and markings in alcohol. Female and male. Carapace yellow, head region darker, thoracic part marginated with black (Figs. 1–2). Dorsum of abdomen light brown mottled with white, and with black folium (Figs. 1–2).

Remarks. The male palpi of the Japanese specimens are slightly different from those of Canadian ones. The shape of projection of tegulum and the shape of conductor are slightly different from each other as shown in Figs. 5–6 (arrow). I consider them to be the intraspecific and geographical variation.

Distribution. Japan (Hokkaido, Honshu), Holarctic.

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Erratum 訂正

Kronestedt, K. & Marusik, Y. M. 2002. On *Acantholycosa solituda* (Levi & Levi) and *A. sterneri* (Marusik) (Araneae: Lycosidae), a pair of geographically distant allied species. Acta Arachnologica, 51(1): 63–71.

Unfortunately, in the above paper, the caption of Map 1 on page 71 was erroneously printed. P. 71. caption of map 1. "*Acantholycosa solituda* (solid circles) and *A. sterneri* (asterisks)" should read "*Acantholycosa solituda* (asterisks) and *A. sterneri* (solid circles)"

The editor would like to apologize for any confusion this may have caused.

The correct version is reproduced below. Please photocopy the slip and paste it at an appropriate position on the page 71.

おわびと訂正：本誌前号の上記論文の Map 1 の説明文に誤りがありました。正しくは下記のとおりです。

Map 1. Collection localities of *Acantholycosa solituda* (asterisks) and *A. sterneri* (solid circles). An open circle nearby Lake Baikal refers to specimen from Irkutsk without precise locality and date.

Acta Arachnologica Vol. 51, No. 2 掲載論文の和文要旨

ロシア沿海州からの興味のもたれる数種のクモの新記録（pp. 93–98）

Tatyana I. Oliger[1], Yuri M. Marusik[2], Seppo Koponen[3]（Nizhnesvirski State Reserve, Russia; [2]IBPN RAS, Magadan, Russia, [3]Zoological Museum, University of Turku, Finland）(pp. 93–98)

ロシア沿海州から5科11属15種のクモの記録を掲げ，それぞれの分布を表示した．これらのうち1科，5属，10種はロシアから初めて，14種は沿海州では初めての記録である．コモリグモ科の1属 *Triccosta* Roewer 1960 を再び有効とし，*Larinioides chabarovi* (Bakhavalov 1981）の標徴形質を掲げた．アジア極東におけるマシラグモ科とヤミサラグモ属 *Arcuphantes*（サラグモ科）の分類について議論した．（和訳：編集委員会）

あまり知られていないカニグモ属の1種 *Xysticus kulczynskii* Wiezbicki 1903（クモ目カニグモ科）の再記載（pp. 99–104）

Dmitri V. Logunov[1], Yuri M. Marusik[2], Seppo Koponen[3]（[1]The Manchester Museum, The University of Manchester, UK; [2]IBPN RAS, Magadan, Russia; [3]Zoological Museum, University of Turku, Finland）(pp. 99–104)

これまで正体が不明瞭であったカニグモ属の1種 *Xysticus kulczynskii* Wiezbicki 1903 をアゼルバイジャンとイランから新たに採集された材料にもとづき再記載した．雄は初めての報告である．近似種であるヨーロッパ産の *X. ferrrugineus* Menge 1876 との識別点を掲げた．（和訳：編集委員会）

日本産キレアミグモ属のクモ（pp. 105–107）

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ヤマキレアミグモは *Zygiella montata* (C. L. Koch 1834）に同定されてきたが，Levi (1974)の図，およびカナダ産の標本との照合の結果，*Zygiella dispar* (Kulczyński 1885）であることを確認し，再記載した．

日本産アシダカグモ科，II．初記録となるカワリアシダカグモ属の新種およびコアシダカグモ属の新種（クモ目：アシダカグモ科：アシダカグモ亜科）(pp. 109–124)

P. Jäger[1]・小野展嗣[2]（[1]Sektion Arachnologie, Forschungsinstitut Senckenberg, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany; [2]〒169-0073 東京都新宿区百人町 3-23-1 国立科学博物館動物研究部）

日本から *Pseudopoda*（カワリアシダカグモ属）を初めて記録し，それに所属する2新種 *Pseudopoda kasariana*（アマミカワリアシダカグモ—新称）および *P. spirembolus*（オキナワカワリアシダカグモ—新称）をそれぞれ奄美大島と沖縄島から記載した．*Sinopoda*（コアシダカグモ属）の4新種，*S. albofasciata*（シロスジコアシダカグモ—新称；渡嘉敷島），*S. derivata*（シマコアシダカグモ—新称；トカラ中ノ島），*S. ogatai*（オガタヒメアシダカグモ—新称；愛知県），*S. stellatops*（ヒメアシダカグモ；本州（中国地方），四国，九州北部）を記載し，*Sinopoda koreana* (Paik, 1968)（トライコアシダカグモ—新称）を日本からはじめて記録した．さらに *Sinopoda okinawana* Jäger & Ono, 2000（リュウキュウコアシダカグモ）と *S. tanikawai* Jäger & Ono, 2000（アマミコアシダカグモ）の採集記録を追加した．コアシダカグモ属のなかに，以下に掲げる種に基づいて新たにリュウキュウコアシダカグモ種群を設定した：*S. albofasciata*（日本），*S. derivata*（日本），*S. fasciculata* Jäger, Gao & Fei 2002（中国），*S. hamata* (Fox 1937)（中国），*S. koreana* (Paik 1968)（韓国，日本），*S. okinawana* Jäger & Ono 2000（日本），*S. tanikawai* Jäger & Ono 2000（日本），*S. wangi* Song & Zhu 1999（中国）．